Remarks

Claims 1-20 are pending in the application. Claims 2-4 and 8-14 are withdrawn from consideration, and claims 1 and 5-7 are allowed. In addition, claims 15-17, 19 and 20 are rejected, while claim 18 is objected to. By this paper, claims 2-4 and 8-14 are canceled, and claims 21 and 22 are added. Based on the following, consideration of the new claims, and reconsideration of the rejected claims, are requested.

Specification

The specification is amended to update the reference to the parent application, which has now issued into a patent.

Election/Restrictions

Claims 2-4 and 8-14 were withdrawn from consideration, being drawn to a non-elected species. In Applicants' amendment of July 12, 2004, claims 2 and 3 were amended such that each was drawn to a process, that properly depended from claim 1. Applicants requested examination of the amended claims. Because amended claims 2 and 3 were not examined, they remain grouped with the other claims withdrawn from consideration. Therefore, by this paper, claims 2-4 and 8-14 are canceled. In addition, claims 21 and 22 are added, each depending directly from claim 1, which is an allowed claim.

Double Patenting

The Examiner rejected claims 15-17 and 19 under the judicially created doctrine of double patenting over claims 10 and 12 of U.S. Patent No. 6,682,458 (Gabriel et al.). Filed with this amendment is a Terminal Disclaimer in compliance with 37 C.F.R. § 1.321(c). Because the double patenting rejections are nonstatutory, it is submitted that the filing of the Terminal Disclaimer overcomes each of the double patenting rejections.

Claim Rejections—35 U.S.C. § 102

The Examiner rejected claims 15-16 and 19 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,321,696 (Nishioka et al.) The MPEP states that "'a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.'" MPEP § 2131, 8th ed., Rev. 2 (citation omitted). The MPEP further states that "'the identical invention must be shown in as complete detail as is contained in the... claim.'" *Id.* (citation omitted). Because claims 15-16 and 19 each contain elements which are neither expressly nor inherently described in Nishioka et al., it is submitted that none of these claims is anticipated by that reference.

Claim 15 of the present application recites "calculating a time for the component temperature to reach the predetermined temperature, the time calculation being based on a predetermined component temperature gradient and the determined temperature difference." In contrast, Nishioka et al. describes a thermostat trouble diagnoses system that sets a predetermined time (CH) "based on the cooling water temperature at the time of starting the engine." (Col. 4, ll. 8-10.) Thus, Nishioka et al. uses a single temperature, not a temperature difference to determine a predetermined time. Moreover, there is no description of using a predetermined component temperature gradient in the calculation of the time. Therefore, the setting of the predetermined time (CH) in Nishioka et al. is markedly different from the time calculation recited in claim 15 of the present application. The time calculation recited in claim 15 is based on a predetermined component temperature gradient and a temperature difference; the setting of the predetermined time in Nishioka et al. is not based on either of these quantities.

In addition to the foregoing, claim 15 of the present application also recites "determining a temperature difference between a current component temperature and a predetermined temperature," and in addition, "regulating operation of the component based on the calculated time." Thus, claim 15 recites the use of "a current component temperature," and "regulating operation of the component...." In contrast, Nishioka et al. determines the

temperature of cooling water in an engine cooling system, and then operates an alarm if it is determined that a thermostat is closed. (Col. 6, ll. 2-4.) Nishioka et al. operates a component (the alarm) based on a temperature of something other than the component—i.e., the cooling water. The cooling water is not even an indirect indicator of the temperature of the alarm. Therefore, Nishioka et al. does not show the identical invention in as complete detail as is contained in claim 15 of the present application. Moreover, claim 15 contains elements which are neither expressly nor inherently described in Nishioka et al. Therefore, with regard to claim 15 and Nishioka et al., the MPEP definition of anticipation is not met.

Claims 16, 17 and 19 each depend directly from claim 15. Therefore, each of these dependent claims contains all of the limitations of claim 15, as well as additional limitations which further distinguish it from the cited reference. For example, claim 16 recites that "the component to be regulated is one of an electric motor, an internal combustion engine, a fuel cell, and a transmission." Nishioka et al. does not even mention an electric motor, a fuel cell or a transmission. As for an internal combustion engine, Nishioka et al. does not describe regulating the engine based on the calculated time, as specifically recited in claim 16. Although Nishioka et al. speaks of a temperature of a cooling water, which can be indicative of an engine temperature, Nishioka et al. uses this information to determine if a thermostat has failed, and then provides an alarm signal if such determination is made. Engine operation is not regulated based on a calculated time, as specifically recited in claim 16. Therefore, with regard to Nishioka et al. and claims 16, 17 and 19 of the present application, the MPEP definition of anticipation is not met.

The Examiner rejected claim 15 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,712,133 (Kyrtsos et al.). Similar to the analysis above, claim 15 of the present application contains elements which are neither expressly nor inherently described in Kyrtsos et al. For example, Kyrtsos et al. describes a system and method for automatic temperature control in vehicles. In particular, Kyrtsos et al. describes determining a desired temperature, comparing the desired temperature to one or more current temperatures, and determining an error between the desired and actual temperature. (Col. 3, ll. 41-48.) Next,

using stored sensor data, a system momentum or gradient is determined which is used in combination with the current operating conditions to predict when the desired temperature will be attained. (Col. 3, ll. 53-61.) This data is then used to determine when to shutdown a heating and cooling system to provide improved fuel economy. (Col. 4, ll. 31-39.) Claim 15 of the present invention recites the use of a current component temperature, and then regulating operation of the component based on a calculated time.

The only device in Kyrtsos et al. that could be considered analogous to the "component" as recited in claim 15, is the heating and cooling system. Thus, if Kyrtsos et al. were to describe each and every element of claim 15 of the present application, it would need to describe determining a temperature difference between a current temperature of the heating and cooling system and a predetermined temperature. This is because Kyrtsos et al. describes regulating operation of the heating and cooling system, and as recited in claim 15 of the present application, the component whose operation is regulated, is also the component whose current temperature is used in determining the temperature difference. To the contrary, Kyrtsos et al. describes the use of temperatures that have nothing to do with the actual temperature of the heating and cooling system itself. Thus, Kyrtsos et al. does not describe in as complete detail the identical invention as contained in claim 15. Because claim 15 contains elements which are neither expressly nor inherently described in Kyrtsos et al., the MPEP definition of anticipation is not met.

Claim Rejections—35 U.S.C. § 103

The Examiner rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Kyrtsos et al. as applied to claim 15 above. The Examiner notes above that Kyrtsos et al. qualifies as prior art under 35 U.S.C. § 102(e). Applicants note that Kyrtsos et al. and the present application have a common assignee, and the subject matter and claimed invention were, at the time the invention was made, owned by the same assignee, or were subject to an obligation of assignment to the same assignee. Therefore, under 35 U.S.C. § 103(c), Kyrtsos et al. is not properly relied upon in an obviousness rejection. Even if it were, however,

Applicants contend that claim 20 contains limitations which are neither taught nor suggested by Kyrtsos et al.

Allowable Subject Matter

Applicants thank the Examiner for allowance of claims 1 and 5-7. The Examiner states that claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Claim 15 is the base claim for claim 18, and as noted above, it is believed that claim 15 is allowable.

Accordingly, allowance of each of the pending claims is requested.

Respectfully submitted,
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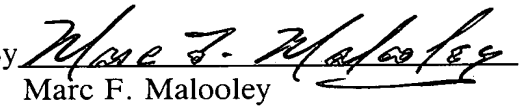
By 
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